



**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : 200810 VFLT-SS20 30K-24V-BK-15D-1.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-1995  
 [TEST] 200810  
 [TESTLAB] QM  
 [ISSUE DATE] 2020-08-10 2:39:47  
 [MANUFAC]  
 [LUMCAT]  
 [LUMINAIRE]  
 [LAMPCAT]  
 [LAMP] ,  
 [BALLAST]  
 [OTHER] Voltage = 24, Current = 0.837  
 [OTHER] Cx = 0.4302, Cy = 0.4041, CCT = 3133, Ra = 97.27  
 [OTHER] CRI = 97.27,98.33,97.94,95.87,98.84,97.88,97.41,97.91,94.01,83.48,93.9,97.96,87.94,98.25,96.86

**CHARACTERISTICS**

Lumens Per Lamp	1606.5 (1 lamp)
Total Lamp Lumens	1606.5
Luminaire Lumens	1846
Total Luminaire Efficiency	115 %
Luminaire Efficacy Rating (LER)	92
Total Luminaire Watts	20.08
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.38
Spacing Criterion (90-270)	0.26
Spacing Criterion (Diagonal)	0.38
Basic Luminous Shape	Point
Luminous Length (0-180)	0.00 m
Luminous Width (90-270)	0.00 m
Luminous Height	0.00 m

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

**CANDELA TABULATION**

	<u>0</u>	<u>30</u>	<u>60</u>	<u>90</u>	<u>120</u>	<u>150</u>	<u>180</u>	<u>210</u>	<u>240</u>	<u>270</u>
<b>0</b>	10115.79	10115.79	10115.79	10115.79	10115.79	10115.79	10115.79	10115.79	10115.79	10115.79
<b>10</b>	5562.86	3239.12	4765.03	3355.38	4875.14	3247.56	3568.22	5577.06	4000.99	5558.27
<b>20</b>	739.48	600.68	689.42	626.08	735.37	637.61	676.46	820.25	698.13	764.85
<b>30</b>	265.10	246.40	252.00	254.25	267.05	256.49	268.95	286.81	273.86	264.75
<b>40</b>	101.28	95.72	96.00	98.62	99.15	95.63	95.85	103.23	99.60	96.06
<b>50</b>	35.41	33.29	34.00	35.20	35.67	34.17	32.84	34.70	33.15	32.95
<b>60</b>	13.54	12.81	12.87	13.06	13.21	11.86	10.58	12.13	11.94	11.94
<b>70</b>	1.24	0.82	0.53	0.74	0.34	0.51	0.87	1.08	1.14	0.25
<b>80</b>	0.00	0.38	0.00	0.18	0.74	0.00	0.06	0.12	0.00	0.17
<b>90</b>	0.00	0.00	0.00	0.00	0.00	0.33	0.15	0.68	0.11	0.00
<b>100</b>	0.06	0.00	0.24	0.12	0.96	0.19	0.82	0.84	0.00	0.46
<b>110</b>	0.45	0.65	0.29	0.49	0.63	0.16	0.48	0.00	1.05	1.18
<b>120</b>	1.02	0.82	0.98	1.26	0.74	1.03	1.28	0.77	0.93	0.66
<b>130</b>	2.32	3.39	2.19	3.43	2.22	2.89	3.27	3.02	2.70	2.79
<b>180</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert. Angles      Horizontal Angles**

	<u>300</u>	<u>330</u>	<u>360</u>
<b>0</b>	10115.79	10115.79	10115.79
<b>10</b>	3803.00	5768.64	5562.86
<b>20</b>	652.78	752.87	739.48
<b>30</b>	257.58	267.16	265.10
<b>40</b>	95.83	101.40	101.28
<b>50</b>	33.24	35.91	35.41
<b>60</b>	11.91	13.84	13.54
<b>70</b>	0.60	1.05	1.24
<b>80</b>	0.00	0.00	0.00
<b>90</b>	0.11	0.34	0.00
<b>100</b>	0.22	0.27	0.06
<b>110</b>	0.04	0.86	0.45
<b>120</b>	0.53	1.39	1.02
<b>130</b>	3.38	2.44	2.32
<b>180</b>	0.00	0.00	0.00

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1423.81	88.60	77.10
0-30	1646.64	102.50	89.20
0-40	1760.21	109.60	95.40
0-60	1832.43	114.10	99.30
0-80	1839.47	114.50	99.60
0-90	1839.63	114.50	99.70
10-90	1144.74	71.30	62.00
20-40	336.41	20.90	18.20
20-50	387.68	24.10	21.00
40-70	78.78	4.90	4.30
60-80	7.05	0.40	0.40
70-80	0.48	0.00	0.00
80-90	0.15	0.00	0.00
90-110	0.73	0.00	0.00
90-120	1.46	0.10	0.10
90-130	3.16	0.20	0.20
90-150	3.16	0.20	0.20
90-180	6.34	0.40	0.30
110-180	5.61	0.30	0.30
0-180	1845.97	114.90	100.00

Total Luminaire Efficiency = 114.90%

**ZONAL LUMEN SUMMARY**

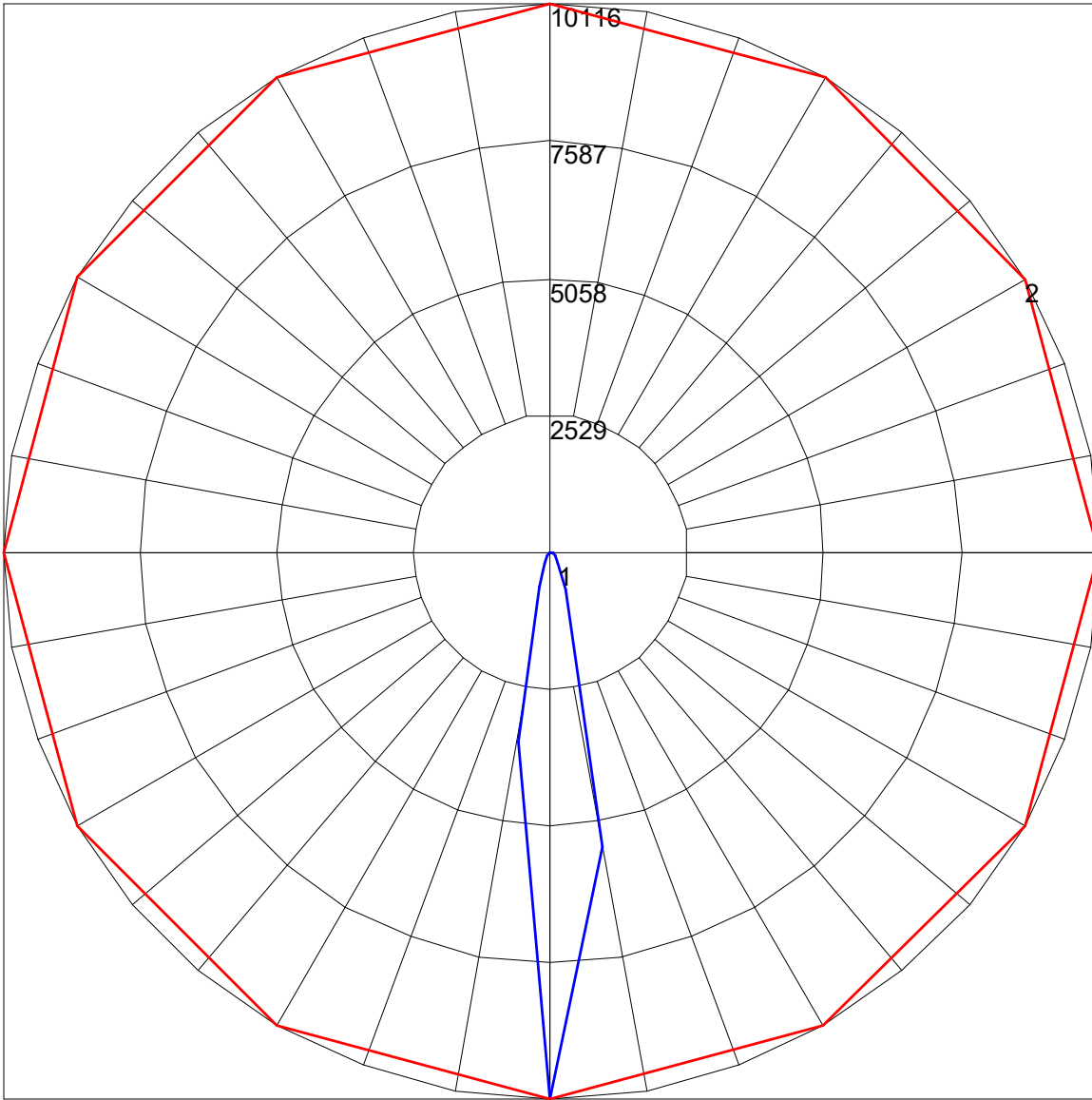
Zone	Lumens
0-10	694.88
10-20	728.93
20-30	222.84
30-40	113.57
40-50	51.27
50-60	20.94
60-70	6.57
70-80	0.48
80-90	0.15
90-100	0.27
100-110	0.46
110-120	0.73
120-130	1.70
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	3.18

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0	
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0		137	137	137	137	133	133	133	133	127	127	127	122	122	122	117	117	117	115
1		132	129	127	125	129	127	125	123	122	121	119	118	117	116	114	113	112	110
2		127	123	119	116	125	121	118	115	117	115	113	114	112	110	111	109	108	106
3		123	117	113	110	121	116	112	109	113	110	107	110	108	105	108	106	104	102
4		119	113	108	104	117	111	107	104	109	105	103	107	104	101	105	102	100	99
5		115	108	103	100	114	107	103	99	105	101	98	104	100	98	102	99	97	95
6		112	104	99	96	110	104	99	96	102	98	95	101	97	94	99	96	94	92
7		109	101	96	93	107	100	96	92	99	95	92	98	94	91	97	93	91	90
8		106	98	93	90	104	97	93	89	96	92	89	95	91	89	94	91	88	87
9		103	95	90	87	102	94	90	87	93	89	86	93	89	86	92	88	86	85
10		100	92	88	84	99	92	87	84	91	87	84	90	87	84	90	86	84	83

POLAR GRAPH



Maximum Candela = 10115.79 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)